

Climatological Data for November, 1909.  
**DISTRICT No. 2, SOUTH ATLANTIC AND EAST GULF STATES.**

CHARLES F. VON HERRMANN, District Editor.

**GENERAL SUMMARY.**

Unusually warm, dry, and sunny weather prevailed over the entire district during the month of November. The temperature averaged nearly  $5^{\circ}$  above the normal, the precipitation was deficient everywhere, and the number of clear days was very large. Several stations in North Carolina, South Carolina, Alabama, and Florida reported no appreciable rainfall during the month, and in many sections drought prevailed to an extent somewhat detrimental to agricultural interests, especially in Florida. The pleasant weather is accounted for by the fact that no barometric depressions passed over the Southern States, the atmospheric pressure being above normal during most of the month. The scattered showers on the 1st to 3d were associated with a moderate storm in the upper Lake region. The rainfall of the 6th to 8th, which was confined chiefly to the northern parts of the district, resulted from inflowing moist northeast winds from the North Atlantic caused by the marked area of high barometer of over 30.7 inches in New England. A similar area of high pressure existed over the North Atlantic States on the 10th and the highest pressure for the month was generally registered between the 8th and 10th, the maximum being 30.66 on the 10th at Richmond, Va. The moderate disturbance that passed from Iowa to western New York on the 16th and 17th caused light rains that were fairly well distributed over the district, which were followed by a period of much colder weather with freezing temperatures nearly to the coast line. General rain occurred in the district on the 22d and 23d under the influence of a moderate barometric depression that formed a well-defined storm center near St. Louis on the morning of the 22d, but next day extended merely as a trough of low pressure from Georgia to Maine. The lowest atmospheric pressure in the district was registered on the 22d to 24th, the minimum being 29.57 inches at Hatteras, N. C.

Early morning fogs formed at many places on several dates, especially on the 8th and 9th. The first killing frosts were reported at a large number of stations on the 18th and 19th, including all the important stations on the Atlantic coast, as Norfolk, Va., Wilmington, N. C., Charleston, S. C. (heavy), and Savannah, Ga.

**TEMPERATURE.**

With the exception of a small area in the extreme southern portion of Florida the temperature over the entire district was above normal. From northern Florida the excess gradually increased toward the northwest until in northern Mississippi the average temperature was more than  $8^{\circ}$  above the normal. In several small areas in northern Alabama and Georgia, and in the western portions of South Carolina and North Carolina the excess exceeded  $6^{\circ}$ , but toward the northeast more moderate temperatures prevailed. In Georgia, Alabama, and Mississippi the State average temperatures for November, 1909, were without exception the highest for November within a period of 20 years. In South Carolina and Florida November, 1896, and 1902, were slightly warmer. The highest monthly means were generally above  $60^{\circ}$  and the lowest not below  $50^{\circ}$ , except at 2 places in Virginia, namely, Hot Springs,  $46.8^{\circ}$ , and Lexington  $48.6^{\circ}$ .

Monthly mean temperatures above  $70^{\circ}$  occurred at the following places in Florida: Key West,  $73.4^{\circ}$ ; Miami,  $73.1^{\circ}$ ; Hypoluxo,  $73.0^{\circ}$ ; and Jupiter,  $72.1^{\circ}$ .

In Virginia and North Carolina the 1st and 2d were the warmest days of the month; farther south the highest temperatures were generally registered on the 4th to 7th, the maximum slightly exceeding  $90^{\circ}$  in southern Georgia and Florida, but not exceed-

ing  $80^{\circ}$  in Virginia. The first period of low temperatures prevailed from the 17th to the 20th; on the 19th the lowest temperatures for the month were experienced everywhere, with killing frosts nearly to the Gulf and to the Atlantic coasts. The minimum was  $15^{\circ}$  at Ramseur, N. C. Another period of moderately cold weather prevailed from the 23d to 26th, after which the temperature again rose decidedly above normal, except in the northern portion of the district.

**PRECIPITATION.**

The rainfall during November was fairly well distributed but was much below normal in all portions of the district. The State averages show deficiencies of from 1.29 to 1.92 inches, and when it is considered that normally November has the smallest rainfall for the year, the fact is sufficient to indicate a widespread drought. In Virginia many springs went dry, and in some instances cattle suffered for lack of water, and in most other States farming operations were delayed. The monthly total rainfall at a large majority of stations was less than 2 inches; the amount exceeded 3 inches at only 2 stations in Florida, viz: St. Augustine, 3.36 inches, and Fernandino, 3.27 inches. The heaviest rains fell over very small areas on the east coast of Florida, in the interior of Alabama, and at single stations in South Carolina, North Carolina, and Georgia. No rainfall occurred at Cedar Keys and Rockwell, Fla., and only traces at Ozark, Ala., Jacksonboro, S. C., Southern Pines and Pinehurst, N. C. A light fall of snow amounting to 0.4 inch (unmelted) occurred at Hot Springs, Va., on the 18th. The average number of days with rain was only 4.

The rains occurred in brief periods about the 1st to 3d, 6th to 8th, and 16th to 17th, and the most general rains fell on the 22d and 23d, when a few stations received amounts exceeding an inch. The maximum 24-hourly fall was 2.10 inches at Tallapoosa, Ga. Light hail fell at a few places in South Carolina on the 6th, and in Georgia and Alabama on the 22d. Relatively few thunderstorms were reported.

**RIVER CONDITIONS.**

The rivers throughout the district remained at low stages the entire month. The stream flow was very uniform, the range between the highest and lowest stages for the month being remarkably small. In some cases the average stages for the month were much below the normal flow, as for example, at Cheraw, S. C., where the mean stage for November during the past 17 years is 3.4 feet, the mean for November, 1909, however, was only 2.3 feet; but, as a rule, no new records were established. The heavy rains of spring and summer seem to have fully supplied the underground sources which enable the rivers to maintain their flow without material diminution for a considerable time during periods of drought.

**MISCELLANEOUS PHENOMENA.**

The prevailing winds were from the southwest in Virginia and South Carolina, from the north in North Carolina, and from easterly directions in the remaining portions of the district. Only two regular stations reported maximum wind velocities exceeding 40 miles an hour, namely, Atlanta, Ga., 52 miles from the southwest on the 22d and Hatteras, N. C., 49 miles from the northwest on the 24th. The wind movement was small and exceeded an average of 10 miles an hour for the month only at the coast stations, Norfolk, Hatteras, Savannah, Jupiter, and Pensacola, and at Atlanta in the interior. The average number of clear days ranged from 18 in Virginia, South Carolina, and Mississippi to 22 in Alabama.

TABLE 1.—Climatological data for November, 1909. District No. 2, South Atlantic and east Gulf States.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.1 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<b>Virginia.</b>																				
Arvonia.	Buckingham.	350	5	51.2	...	74	21	24	19	38	0.91	-	0.65	T.	5	21	2	7	sw.	
Ashland.	Hanover.	221	18	50.8	+ 3.5	79	2	23	19	35	1.02	- 0.57	0.88	T.	2	10	15	5	s.	
Buchanan.	Botetourt.	820	5								0.41	-	0.32	0.0	2	11	3	9	w.	
Callaway.	Brunswick.	250	15	53.6	+ 4.7	79	1	22	17	34	0.94	- 1.16	0.60	0.0	5	18	8	4	sw.	
Cape Henry.	Princess Ann.	20	35	54.2	+ 2.1	78	1	22	19	25	0.49	- 2.25	0.28	0.0	7	17	4	9	sw.	
Charlottesville.	Albemarle.	800	20	53.3	+ 5.7	79	2	26	19	33	0.60	- 1.97	0.26	T.	4	16	6	8	sw.	
Clarksville.	Mecklenburg.	15									0.50	- 2.32	0.35	0.0	3	19	1	1	sw.	
Columbia.	Fluvanna.	246	11	51.3	+ 5.1	79	2	23	19	42	1.28	- 0.82	0.91	0.0	5	17	3	9	sw.	
Danville.	Pittsylvania.	413	9								0.21	-	0.08	T.	4	18	4	8	w.	
Diamond Springs.	Princess Anne.	20		53.2		80	12	24	19	44	0.81	-	0.57	0.0	3					
Dinwiddie.	Dinwiddie.	267	5																	
Hampton.	Elizabeth City.	5	26	54.6	+ 4.6	73	1	31	19	28	0.77	- 1.87	0.37	0.0	3	18	4	8	ne.	
Hot Springs.	Bath.	2,195	17	46.8	+ 5.6	69	9	20	30	35	1.09	- 1.07	0.48	0.4	5	22	5	3		
Ivor.	Southampton.	87		54.6		77	12+	26	28	46	0.90	-	0.69	0.0	3					
Lexington.	Rockbridge.	1,060	32	48.6	+ 5.1	78	2	19	30	41	0.97	- 1.80	0.64	T.	5	25	3	2		
Lynchburg.	Campbell.	685	38	52.5	+ 5.6	77	12	26	30	42	0.52	- 2.17	0.33	T.	5	16	8	6	nw.	
New Castle.	Craig.	1,300									0.16	-	0.00	0.0	2					
Newport News.	Warwick.	55	6	54.6		76	12	30	19	28	1.10	-	0.48	T.	6	18	7	5	sw.	
Norfolk.	Norfolk.	91	39	55.0	+ 4.0	76	1	31	19	31	0.52	- 2.18	0.34	0.0	4	16	6	8	n.	
Petersburg.	Dinwiddie.	60	22	52.2	+ 3.4	79	1	24	19	39	1.28	- 1.17	0.40	0.0	5	20	0	5	n.	
Randolph.	Charlotte.	334									0.13	-	0.10	0.0	2	15	11	4	w.	
Richmond.	Henrico.	144	30	53.1	+ 3.9	75	2	25	19	31	0.62	- 1.70	0.48	T.	5	13	13	4	s.	
Rocky Mount.	Franklin.	1,150	15	51.4	+ 2.5	75	8†	19	19	48	0.22	- 2.66	0.22	0.0	1	23	0	7	ne.	
Sabot.	Goochland.	125									0.71	-	0.57	0.0	4	25	0	5		
Saxa.	Charlotte.	350	6	52.8		78	2†	18	19	48	1.54	-	1.34	0.0	2	25	0	5	s.	
Spotsylvania (near).	Surry.	15	21	53.6	+ 5.0	77	1	20	19	34	0.70	-	2.34	0.50	0.0	3	18	6	6	sw.
Williamsburg.	James City.	70	18	52.6	+ 4.5	77	1	24	19	32	0.35	- 2.14	0.25	T.	3	20	4	6	sw.	
<b>North Carolina.</b>																				
Beaufort.	Carteret.	10	7	59.8		76	1†	36	25	27	2.52	-	1.05	0.0	7	22	4	4	ne.	
Belhaven.	Beaufort.	4		56.3		80	1†	22	19	42	1.23	-	0.68	0.0	4	23	2	5	w.	
Brewers.	Wilkes.	1,950	12	51.8	+ 4.4	79	28	21	19	50			0.15	0.0	3	19	9	2	s.	
Carocean.	Rutherford.	806	9	54.4		79	5	23	19	43	0.28	-								
Chalybeate Springs.	Harnett.	500	3	53.2		78	13	18	19	47										
Chapel Hill.	Orange.	500	51	55.6	+ 5.7	79	2†	22	19	48	0.55	- 2.23	0.36	0.0	5	17	9	4	se.	
Charlotte.	Mecklenberg.	808	33	56.2	+ 5.8	77	4	30	19	32	0.44	- 2.42	0.35	0.0	3	15	10	5	ne.	
Chimney Rock.	Rutherford.	1,150		55.5		81	2	25	19	42	0.07	-	0.06	0.0	3	22	5	3	w.	
Clinton.	Sampson.	156	2	57.3		80	4†	21	19	41	0.51	-	0.35	0.0	3	15	12	7	sw.	
Eagleton.	Northampton.	66	4	54.0		77	1	22	19	34	0.82	-	0.28	0.0	5	19	7	4		
Edenton.	Chowan.	30	15	53.0	+ 1.4	74	2	25	19	32	2.00	-	0.85	0.90	0	4	16	8	6	ne.
Fayetteville.	Cumberland.	170	22	57.3	+ 5.5	80	1†	23	19	42	0.21	-	2.60	0.12	0	4	25	0	5	
Goldsboro.	Wayne.	102	39	54.8	+ 3.6	87	1	23	19	45	0.45	-	1.85	0.12	0	4				
Graham.	Alamance.	656	7								0.15	-	0.08	0.0	2					
Greensboro.	Guildford.	843	28	54.6	+ 6.0	78	2†	25	19	42	0.45	-	2.22	0.25	0	4				
Greenville.	Pitt.	75	16								2.12	-	0.55	1.30	0	6				
Hatteras.	Dare.	11	35	58.9	+ 2.2	78	2	40	19	20	2.24	-	2.43	1.27	0	8	21	5	4	u.
Henderson.	Vance.	490	16	53.2	+ 3.7	74	1†	27	19	31	0.34	-	2.41	0.14	0	4	20	8	2	ne.
Kinston.	Lenoir.	46	11																	
Lenoir.	Caldwell.	1,186	38	52.1	+ 6.1	78	2	20	19	51	0.88	- 2.21	0.57	0.0	3	26	1	3	s.	
Lexington.	Davidson.	810	8	54.8		78	2†	22	19	43	0.74	-	0.30	0.0	4	23	6	1	s.	
Lincolnton.	Lincoln.	904	4	54.2		80	1	22	19	45	1.30	-	1.00	0.0	3	26	0	4	sw.	
Louisburg.	Franklin.	375	18	53.9	+ 5.5	75	2†	22	19	46	0.38	-	0.38	0.0	1	16	8	6	se.	
Lumberton.	Robeson.	102	26	56.0	+ 4.0	83	1	22	19	49	0.44	-	1.78	0.40	0	4				
Manteo.	Dare.	12	4	56.2		77	2	30	19	48	1.22	-	0.42	0.0	5	21	3	6	n.	
Marion.	McDowell.	1,425	17	55.0	+ 0.1	83	3	21	19	45	0.87	-	2.27	0.56	0	4	17	10	3	w.
Moncure.	Chatham.	145	15	54.2	+ 4.0	79	13	18	25	50	0.17	-	2.42	0.10	0	3	20	5	5	nw.
Morganton.	Union.	580	15	55.0	+ 5.5	81	4	18	19	48	0.20	-	2.70	0.20	0	1	21	6	3	sw.
Mt. Airy.	Burke.	1,135	22	53.8	+ 5.7	77	2	22	19	44	0.48	-	2.23	0.25	0	3	25	2	2	nw.
Mt. Holly.	Surry.	1,043	21	51.4	+ 5.0	78	15	18	20	53	0.55	-	2.08	0.30	0	3	26	3	1	sw.
Nashville.	Gaston.	616	12								0.80	-	1.80	0.46	0	4				
Newbern.	Nash.	190	5	54.1		79	5	20	19	46	0.50	-	0.26	0.0	5	13	12	5	n.	
Pinehurst.	Craven.	12	27	58.5 <sup>a</sup>	+ 4.4	82	1	24	19	47	1.01	-	1.92	0.30	0	7	9	4	ne.	
Pittsboro.	Moore.	650	5	57.6		84	4	25	19	39	T.	-	T.	0.0	0	7	9	4	w.	
Raleigh.	Chatham.	480	18																	
Ramsour.	Randolph.	442	2	51.8		77	4†	15	19	50	0.18	-	0.18	0.0	1	14	13	3	nw.	
Randleman.	Randolph.	810	4								0.52	-	0.22	0.0	5					
Reidsville.	Rockingham.	828	10	55.4 <sup>b</sup>	+ 7.7	79	4†	30	30	41	0.69	-	1.88	0.24	0	5	18	3	9	sw.
Roxboro.	Richmond.	210	14	56.6 <sup>c</sup>	+ 4.8	80	4†	23	19	45	1.45	-	1.11	1.45	0.0	1				
Salem.	Person.	600	11																	
Salisbury.	Forsythe.	1,000	14	52.3	+ 4.3	77	2	21	19	47	1.03	-	1.53	0.75	0	5	23	3	4	n.
Rowan.	Rowan.	760	25								1.33	-	1.30	0.55	0	5				
Scotland Neck.	Stokes.	900	17	52.0	+ 5.1	76	1†	18	19	44	0.58	-	2.07	0.38	0	4	18	6	6	sw.
Seaford.	Halifax.	80	5	54.6		78	13	22	19	37	0.90	-	0.40	0.0	6	14	3	13	ne.	
Seima.	Johnston.	225	19	53.6	+ 2.8	80	2	22	19	38	0.90	-	1.79	0.45	0	5				
Settle.	Iredell.	700	13	54.0	+ 5.3	78	2	22	19	48	0.60	-	2.13	0.30	0	3	21	3		



TABLE 1.—Climatological data for November, 1909. District No. 2—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.							
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.							
<i>Georgia—Cont'd.</i>																					
Milledgeville.	Baldwin.	276	21	57.3 <sup>a</sup>	+ 3.8	82	7	24	19	38	0.68	- 1.68	0.48	0.0	4	18	5	7	nw.	Prof. O. M. Cone.	
Millen.	Jenkins.	158	22	58.3	+ 3.1	86	6	29	19	48	0.70	- 1.34	0.55	0.0	2	12	0	1	ne.	M. G. McComb.	
Montezuma.	Macon.	292	4								1.12	-	1.12	0.0					ne.	W. N. Drewry.	
Monticello.	Jasper.	800	13	59.4	+ 4.4	82	4	27	19	35	0.76	- 1.89	0.43	0.0		3				ne.	Miss Maud C. Penn.
Morgan.	Calhoun.	337	17	60.3	+ 4.2	84	4	30	18	41	0.05	- 2.96	0.05	0.0		1				e.	J. J. Beck.
Newman.	Coweta.	939	21	60.4	+ 8.2	89	5	26	19	49	1.23	- 1.71	0.68	0.0	2				e.	Mrs. I. J. Milner.	
Oakdale.	Fulton.	810	9								1.30	-	0.92	0.0	3				e.	W. R. B. Whittier.	
Point Peter.	Oglethorpe.	1,000	20	56.0 <sup>a</sup>	+ 5.0	83	4	28	19	41	1.40	- 1.53	0.95	0.0	2	20	8	2	se.	C. M. Witcher.	
Poulan.	Worth.	365	18	61.1	+ 4.3	89	5	25	19	44	0.44	- 1.84	0.26	0.0	3	28	2	0	s.	Dr. J. F. Wilson.	
Putnam.	Marietta.	10	18	61.2 <sup>b</sup>	+ 4.4	89	6	25	19	44	1.00	- 1.01	1.60	0.0	1				s.	Mrs. J. M. Collum.	
Quitman.	Brooks.	173	25	65.4 <sup>a</sup>	+ 6.3	92	4 <sup>c</sup>	26	19	51	0.70	- 1.49	0.70	0.0	1				s.	A. B. Jones.	
Ramsey.	Murray.	1,363	16	58.7	+ 6.8	77	4 <sup>c</sup>	28	19	36	1.18	- 2.05	0.64	0.0	2	24	2	4	nw.	D. E. Humphreys.	
Resaca.	Gordon.	637	16								0.86	- 2.44	0.56	0.0	2				se.	D. A. Norton.	
Rome.	Floyd.	570	54	55.2	+ 4.0	82	4	25	19	46	1.12	- 2.30	0.02	0.0	3				w.	W. M. Towers.	
St. George.	Charlton.	3																	John Harris.		
St. Mary's.	Camden.	20	18	63.2	+ 3.3	85	4	38	25	38	1.69	- 0.35	0.44	0.0	9	16	10	4	ne.	David C. Sterling.	
Savannah.	Chatham.	65	59	62.6	+ 4.4	84	4	38	19	27	0.11	- 2.05	0.05	0.0	3	14	14	2	ne.	U. S. Weather Bureau.	
Statesboro.	Bullock.	253	9																e.	J. C. Cromley.	
Talbotton.	Talbot.	750	16	62.0	+ 7.5	89	3	27	19	41	0.81	- 2.06	0.30	0.0	3	25	2	3	sw.	R. M. Strickland.	
Tallapoosa.	Haralson.	1,150	11	58.4	+ 6.6	88	4	24	19	50	2.18	- 0.96	2.10	0.0	2				w.	U. S. Weather Bureau.	
Thomasville.	Thomas.	273	26	62.5	+ 3.3	86	4	38	19	41	1.39	- 1.14	1.36	0.0	2	14	10	6	e.	E. A. Newton.	
Toccoa.	Stephens.	1,050	24	55.8	+ 5.6	81	4	26	19	37	1.01	- 1.59	0.91	0.0	3				w.	J. M. Atwood.	
Valdosta.	Lowndes.	219	4	63.2		89	5 <sup>c</sup>	26	19	49	0.20	-	0.20	0.0	1				ne.	Miss Anna L. Twitty.	
Valona.	McIntosh.	10	9	62.4		85	4	24	26	42	0.90	-	0.70	0.0	3	24	6	0	ne.	Miss Ella B. Smith.	
Washington.	Wilkes.	630	22	57.6	+ 5.0	81	4	29	19	39	1.40	- 1.47	0.88	0.0	4				ne.	Thos. Sasser.	
Waycross.	Ware.	131	20	62.6	+ 3.0	89	8 <sup>c</sup>	27	19	46	1.02	- 0.44	0.85	0.0	4				e.	Mrs. H. W. Blount.	
Waynesboro.	Burke.	86	18	58.2	+ 3.6	84	3	28	20	38	0.29	- 1.33	0.27	0.0	2				e.	E. N. Dunn.	
West Point.	Troup.	620	21	57.2	+ 3.2	81	4	29	19	44	1.54	- 1.43	1.20	0.0	3				e.	G. A. Wright.	
Woodbury.	Meriwether.	641	9	56.2 <sup>a</sup>		89	5	28	19	49	1.35	-	0.65	0.0	3				ne.		
<i>Alabama.</i>																					
Alaga.	Houston.	105	4								0.10	-	1.71	0.06	0	2	19	5	6	n.	James L. Willis.
Aniston.	Calhoun.	741	18	59.0	+ 7.1	82	4	27	19	37	1.8	- 1.71	1.00	0.0	4	18	6	6	se.	U. S. Weather Bureau.	
Asheville.	St. Clair.	685	18	55.8 <sup>d</sup>	+ 4.3	84	9	23 <sup>b</sup>	19	45 <sup>b</sup>	1.44	- 1.28	0.73	0.0	4	19	5	6	sw.	George R. Cather.	
Auburn.	Benton.	732	20	61.6	+ 7.2	85	4	30	19	36	2.36	- 1.40	1.36	0.0	3	17	11	2	se.	James T. Anderson.	
Bermuda.	Conecuh.	149	8								0.96	-	0.46	0.0	3	24	5	1	ne.	S. T. Pruitt.	
Birmingham.	Jefferson.	22	60.3 <sup>a</sup>	+ 3.9	84 <sup>a</sup>	1 <sup>c</sup>	26 <sup>b</sup>	19	42 <sup>b</sup>	1.23	- 1.71	1.15	0.0	4	22	6	2	nw.	M. J. Morris.		
Boligee.	Greene.	119	21	61.4	+ 7.3	82	5	31	18	31	1.05	- 2.34	0.54	0.0	3	11	15	4	s.	U. S. Weather Bureau.	
Calera.	Shelby.	500	8								1.02	-	0.52	0.0	2	28	1	1	e.	Guy P. Brugh.	
Camp Hill.	Tallapoosa.	738	8	60.7		89	1	28	19	44	1.48	-	0.64	0.0	3	15	14	1	sw.	L. G. Privett.	
Cedar Bluff.	Cherokee.	594	5								0.99	-	0.55	0.0	2	27	3	0		Dr. Lyman Ward.	
Citronelle.	Mobile.	331	21	63.4	+ 3.7	83	4 <sup>c</sup>	23	19	31	0.81	- 2.21	0.40	0.0	9	25	4	1	s.	Joe L. Daniel.	
Clanton.	Chilton.	530	16	58.9	+ 4.8	84	4 <sup>c</sup>	26	19	41	1.63	- 1.29	0.90	0.0	3	17	1	12	se.	George A. Maloney.	
Cordova.	Walker.	334	15	57.6	+ 6.2	85	4	23	19	45	0.55	- 2.59	0.45	0.0	3	20	7	3	s.	Wallace C. Edler.	
Cullman.	Cullman.	802	5	58.0		84	4	23	19	46	1.31	-	0.72	0.0	6	20	7	3	e.	Scott Maxwell.	
Dadeville.	Tallapoosa.	760	4								2.28	-	0.86	0.0	3	17	8	5	e.	Eugene A. Grayot.	
Daphne.	Baldwin.	18	65.1	+ 5.6	83	1 <sup>c</sup>	37	18 <sup>b</sup>	30	38	0.68	- 2.00	0.28	0.0	4	22	3	5	nw.	Dr. W. B. Fulton.	
Demopolis.	Marengo.	17									1.08	- 1.26	0.60	0.0	2	27	2	1	sw.	John H. Young.	
Double Springs.	Winston.																		George E. Pegram.		
Eufaula.	Barbour.	200	25	57.4	+ 1.7	81	4	25	19	44	0.34	- 2.55	0.26	0.0	2	22	4	4	nw.	Charles D. Huggins.	
Evergreen.	Conecuh.	245	25	65.4	+ 9.3	90	7 <sup>c</sup>	28	18	50	1.02	- 2.29	1.02	0.0	1	21	0	9	n.	Dr. J. B. Whitlock.	
Fayette.	Fayette.	359																	Robert L. Whitecomb.		
Flomaton.	Escambia.	91	7	61.6		85	5 <sup>c</sup>	32	19	46	0.55	-	0.30	0.0	3	27	1	2	n.	W. V. Burns.	
Fort Deposit.	Lowndes.	520	25	60.8 <sup>b</sup>	+ 5.1	82 <sup>a</sup>	4	20	19	46 <sup>a</sup>	1.13	- 1.79	0.63	0.0	3	21	0	9	s.	T. J. Farris.	
Gadsden.	Etowah.	621	15	58.9	+ 7.6	84	4	26	19	40	1.02	- 2.15	0.52	0.0	2	24	0	6	ne.	J. L. Parish.	
Goodwater.	Coosa.	823	23	57.0	+ 2.8	82	4 <sup>c</sup>	25	19	44	1.20	- 1.89	1.10	0.0	2	24	0	6	nw.	D. P. Goodhue.	
Greensboro.	Hale.	230	30	60.8	+ 5.5	80	1 <sup>c</sup>	29	19	33	0.72	-	0.40	0.0	2	26	1	3	s.	D. S. Brown.	
Greenville.	Butler.	444	8								0.53	-	0.39	0.0	2	27	0	3	se.	W. B. W. Yerby.	
Hamilton.	Marion.	13	60.0 <sup>a</sup>	+ 7.4	87 <sup>a</sup>	4	23	19	49 <sup>b</sup>	1.08	- 2.40	0.53	0.0	5	29	0	1	n.	E. Lewis.		
Highland Home.	Crenshaw.	17									1.84	-	0.80	0.0	0				e.	Prof. H. O. Sargent.	
Livingston.	Sumter.	169	25	57.4	+ 3.6	80	1 <sup>c</sup>	26	19	43	1.25	- 1.63	0.64	0.0	3	24	0	6	e.	Prof. Samuel Jordan.	
Lock No 4.	Talladega.	510	12	58.2	+ 6.4	84	4	24	19	41	0.87	- 2.02	0.45	0.0	2	27	1	2	n.	Robert L. King.	
Lucy.	Houston.	4	60.9								0.24	-	0.24	0.0	0	18	12	0		U. S. Engineers.	
Maple Grove.	Cherokee.	16	55.9	+ 5.4	85	4	24	19	44	1.13	- 2.11	0.58	0.0	2	25	1	4	se.	A. L. Crosby.		
Mentone.	De Kalb.	1,595	2								0.92	-	0.80	0.0	0	25	6	4	e.	Mrs. A. L. Awbrey.	
Mistletoe.	Macon.	6	37	64.6	+ 7.1	82	2	36	19	30	0.50	- 3.24	0.24	0.0	7	21	8	1	n.	E. Mason.	
Mobile.	Montgomery.	57	37	61.5	+ 5.8	84	5	30	19	36	0.92	- 2.21	0.40	0.0	6	21	7	2			

## MONTHLY WEATHER REVIEW.

NOVEMBER, 1909

TABLE 1.—*Climatological data for November, 1909. District No. 2—Continued.*

Stations.	Counties.	Elevation, feet.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.	
			Length of record, yrs.	Mean.	Highest.	Date.	Greatest daily range.	Total.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days 0.1 inch or more.	Number of partly cloudy days.	Number of cloudy days.	
<i>Florida—Cont'd.</i>														
Cedar Keys.	Levy.	10	12	67.8	+ 4.6	91	13	43	24	26	0.00	- 2.33	0.00	J. B. Lutterloh.
Clermont.	Lake.	105	16	68.7	+ 0.9	89	5	45	24	33	1.05	- 0.10	0.60	S. S. Fesler.
DeFinikak Springs	Walton.	193	14			85*	16				0.45	- 3.40	0.35	R. W. Storrs.
DeLand.	Volusia.	27	13	64.6	- 0.1	87	5	34	25	42	1.07	- 0.67	0.0	O. B. Webster.
Eustis.	Lake.	56	17	66.0	+ 0.3	90	5	40	25	40	0.73	- 0.71	0.33	C. T. Smith.
Federal Point.	Putnam.	5	17	65.8	+ 1.8	88	2	32	25	40	1.15	- 1.03	0.42	E. S. Hubbard.
Fenholloway.	Taylor.	75	3											J. Wigglesworth.
Fernandina.	Nassau.	10	12	66.2	+ 3.4	86	4	43	24	33	3.27	+ 0.75	1.33	W. B. C. Duryee.
Flamingo.	Monroe.	4	7											E. R. Bradley.
Fort Meade.	Polk.	125	17	67.4	+ 0.8	90	5	37	26	43	0.39	- 1.07	0.25	G. L. Brodrick.
Fort Myers.	Lee.	12	17	68.6	- 1.2	82	1†	48	26	47	0.38	- 0.91	0.23	M. M. Gardner.
Fort Pierce.	St. Lucie.	6	8	70.0		82	1†	48	25	29	2.93	- 0.69	0.0	R. L. Goodwin.
Gainesville.	Alachua.	176	23	65.6*	+ 3.1	88	5	38	25	41	0.30	- 1.80	0.18	J. P. H. Bell.
Grasmere.	Orange.	175	13	66.4	+ 0.3	88	5	40	25	37	1.32	- 0.69	0.0	J. B. Escott.
Hilliard.	Nassau.	69	1	62.9		85	4†	30	25	44	1.42	- 0.54	0.0	D. W. Griffing.
Huntington.	Putnam.	56	12	65.0	+ 0.8	89	5	36	25	42	1.60	- 0.09	1.03	E. C. Walker.
Hypoluxo.	Palm Beach.	4	9	73.0		85	23	54	25	26	0.32	- 0.27	0.0	G. A. Angervine.
Inverness.	Citrus.	43	8	63.6		85	5	35	25	42	0.22	- 1.22	0.12	W. H. Miller.
Jacksonville.	Duval.	101	37	64.8	+ 3.5	84	4	40	24	29	0.39	- 1.20	0.41	U. S. Weather Bureau.
Jasper.	Hamilton.	152	11								0.40	- 1.10	0.40	G. W. Duncan.
Johnstown.	Bradford.	125	14	63.4	+ 3.5	90	5	30	19	47	1.15	- 0.38	0.59	A. M. C. Brasch.
Jupiter.	Palm Beach.	34	21	72.0	+ 0.4	82	17	51	25	29	0.98	- 2.07	0.50	U. S. Weather Bureau.
Key West.	Monroe.	14	38	73.4	- 0.9	82	23	62	26	13	0.06	- 2.30	0.06	U. S. Weather Bureau.
Kissimesse.	Osceola.	65	17	67.6	+ 0.3	84	2†	42	26	33	1.49	- 0.41	0.68	J. A. Simpson.
Lake City.	Columbia.	210	20	65.2	+ 3.5	90	5	34	25	45	0.50	- 1.80	0.30	W. B. Knight.
Live Oak.	Suwannee.	109	8											D. O. Henry.
Macclenny.	Baker.	125	13	62.4	- 0.1	87	4†	31	19	46	0.88	- 0.64	0.75	Griffing Bros. Co.
Madison.	Madison.	200	6	64.6		88	4	35	19†	37	0.27	- 0.48	0.24	E. J. Vanz.
Malabar.	Brevard.	24	8	70.9		87	6	44	25	35	1.28	- 0.55	0.0	J. F. Farley.
Manatee.	Manatee.	8	17	68.4	+ 1.3	85	6	40	30	34	0.56	- 1.06	0.50	F. C. Whittaker.
Marianna.	Jackson.	50	9											J. L. Behymer.
Merritt's Island.	Brevard.	20	30	69.9	+ 1.4	82	6	46	23	26	0.81	- 1.49	0.40	G. D. Provost.
Miami.	Dade.	5	13	73.1		85	3	50	25	28	0.60	- 0.60	0.0	E. V. Blackman.
Middleburg.	Clay.	10	8	63.7*		89	5	34*	26	45	1.88	- 0.65	0.0	G. A. Chalker.
Molino.	Escambia.	49	8	61.0		85	7	27	19	46	1.62	- 0.65	0.0	W. H. Trimmer.
Monticello.	Jefferson.	207	4	65.5*		86	13	36	19†	41	0.45	- 0.45	0.0	E. C. Potter.
Mt. Pleasant.	Gadsden.	260	5	62.8		88	4	29	19	45	0.48	- 0.30	0.0	Miss A. Grubb.
Newport.	Wakulla.	8				86	5†				T.	T.	0	J. W. Ladd.
New Smyrna.	Volusia.	9	21	67.8	+ 1.8	85	17	42	25	34	2.08	- 0.72	1.25	F. Nordman.
Ocals.	Marion.	93	23	65.4	+ 1.2	89	5†	35	26	47	0.45	- 1.16	0.21	F. T. Schreiber.
Orange City.	Volusia.	39	19								2.89	+ 1.22	1.73	J. D. Graham.
Orlando.	Orange.	111	17	67.0	+ 0.4	86	5	40	25	49	0.65	- 0.70	0.30	James Thomson.
Pensacola.	Escambia.	149	31	64.4	+ 4.8	80	6	38	24	27	0.88	- 2.86	0.40	U. S. Weather Bureau.
Plant City.	Hillsboro.	121	17	66.2	- 0.3	85	5	40	25	44	0.52	- 0.88	0.52	E. B. Trask.
Rockledge.	Brevard.	28	1	69.0		87	1	46	25	30	1.19	- 0.30	0.0	J. H. White.
Rockwell.	Marion.	10	10	64.8*		88	4	35	25	44	0.00	- 0.00	0.0	Dunellen Phos. Co.
St. Andrew.	Huntington.	14	14	62.2	+ 2.6	89	1†	32	19	34	0.49	- 2.06	0.31	W. A. Emmons.
St. Augustine.	St. Johns.	10	59	66.0	+ 1.9	84	6	42	24	30	3.30	+ 1.14	1.56	J. R. Palmer.
Sand Key.	Monroe.	48	6								0.89	- 1.87	0.40	U. S. Weather Bureau.
St. Leo.	Pasco.	140	14	67.0	+ 0.7	87	5	42	26	32	0.61	- 1.01	0.49	G. Schneider.
Satsuma Heights.	Putnam.	98	1	63.4		85	5	35	25	37	1.29	- 0.77	0.0	Satsuma Co.
Switzerland.	St. Johns.	10	13	65.0*	+ 3.1	87	5	39	25†	35	0.67	- 1.61	0.18	W. C. Steele.
Tallahassee.	Leon.	102	24	63.6	+ 4.1	84	4	36	19†	33	0.48	- 2.06	0.38	W. H. Markham.
Tampa.	Hillsboro.	79	19	67.6	+ 2.2	86	5	46	19	29	0.56	- 1.16	0.51	U. S. Weather Bureau.
Tarpon Springs.	Hillsboro.	20	18	67.4	+ 0.8	88	6†	41	25†	37	0.23	- 1.56	0.23	A. P. Albaugh.
Titusville.	Brevard.	6	17								0.89	- 1.87	0.40	F. M. Taylor.
Wausau.	Washington.	250	12								0.08	- 4.23	0.08	C. Jones.
<i>Mississippi.</i>														
Aberdeen.	Monroe.	210	21	60.2	+ 9.2	86	5	26	19	46	0.87	- 2.18	0.82	L. D. Godfrey, jr.
Agricultural College.	Oktibbeha.	424	19	61.3	+ 7.3	85	4	27	19	42	1.40	- 1.57	0.80	Prof. W. R. Perkins.
Bay St Louis.	Hancock.	28	16	64.2	+ 4.1	85	2	38	25	31	0.95	- 2.00	0.28	Brother Stanislaus.
Biloxi.	Harrison.	34	18	65.9	+ 6.1	87	2	37	19	31	2.20	- 0.70	1.88	Miss M. Josie Pope.
Boonville.	Prentiss.	504	15	59.4	+ 7.6	79	4†	28	18†	32	2.09	- 1.68	0.72	D. T. Price.
Brookhaven.	Lincoln.	500	21	61.8	+ 5.2	86	4	28	19	46	0.81	- 3.10	0.30	W. J. Bee.
Columbia.	Maroon.	100	5								0.61	- 0.26	0.0	N. R. Drummond.
Columbus.	Lowndes.	250	21	60.0	+ 6.5	88	4	26	19	45	1.47	- 2.94	0.46	J. B. Love.
Crystal Springs.	Copiah.	488	17	61.6	+ 5.0	83	5	28	19	36	1.16	- 1.83	0.65	D. H. Miller.
Edinburg.	Leake.	1	50.3			85	4	23	19	45	1.51	- 0.72	0.0	J. Y. Blocker.
Enterprise.	Clarke.	243	4								0.70	- 0.34	0.0	J. B. Thompson.
Fulton.	Itawamba.										2.16	- 1.04	0.0	A. L. Summers.
Hattiesburg.	Forest.	154	16	62.3	+ 4.7	86	1†	28	19	44	1.44	- 1.67	0.64	T. C. Spence.
Haslehurst.	Copiah.	460	21	61.4*	+ 4.5	85	1†	25	18	47	1.54	- 1.52	0.87	J. D. Granberry.
Jackson.	Hinds.	280	23	62.6	+ 7.6	88	4	25	19	47	1.06	- 2.45	0.58	Frank J. Heintz.
Lake.	Scott.	446	21	58.4	+ 5.3	85	4	21	19	47	0.75	- 1.99	0.40	J. A. Freeman.
Lake Como.	Jasper.	6	6	59.0		82	9†	25	19	50	1.79	- 0.90	0.0	C. Thigpen.
Laurel.	Jones.	241	5	62.8		87	4	26	19	45	1.56	- 0.51	0.0	Thos. W. Flynt.
Leakesville.	Greene.	15	62.3	+ 3.9		88	4	26	19	47	0.20	- 2.81	0.29	Dr. Samuel Pool.
Louisville.	Winston.	561	20	61.7	+ 7.3	86	4	25	19	43	1.18	- 1.72	0.50	B. T. Webster.
McNeill.	Pearl River.	185	21	63.5		84	4	31	19	35	1.01	- 0.45	0.0	Finis E. Carleton.
Macon.	Norubee.	230	6	58.8	+ 4.6	86	4	25	19	47	0.96	- 0.65	0.0	Prof. E. B. Ferris.
Magnolia.	Pike.	415	13	63.4	+ 5.2	84	4	28	19	40	1.49	- 1.48	0.62	Miss Ruby V. Roberts.
Meridian.	Lauderdale.	375	19	59.3	+ 6.0	82	4	27	19	38	0.71	- 3.43	0.44	U. S. Weather Bureau.
Merrill.	Greene.	76	4								0.22	- 0.12	0.0	L. C. Helms.
Monticello.	Lawrence.	209	2	60.2		84	1†	29	18†	49	1.01	- 0.58	0.0	Dr. G. A. Teunissen.
Okolona.	Chikasaw.	311	21	59.8	+ 7.8	87	4	26	19	43	0.90	- 2.10	0.40	D. H. Shell.
Pascagoula <sup>d</sup> .	Jackson.	15	63.0			83	7	34	19	41	0.74	- 0.74	0.0	Tom Swartwout.
Pearlington.	Hancock.	10	21	62.6	+ 3.4	82	1†	33	19	35	2.16	- 1.00	0.59	Miss Annette Koch.
Porterville.	Kemper.	4	60.2			84	4	25	19	43	1.07	- 0.77	0.0	W. G. Sanders.
Shubuta.	Clarke.	201	4								0.92	- 0.30	0.0	Geo. A. Floyd.
Way														











